THE REPRESENTATIVES OF ERIGERON ACRIS IN NORTHEASTERN AMERICA.

M. L. FERNALD and K. M. WIEGAND.

Erigeron acris L. is the type of a small group of plants which has one or more representatives in nearly all the boreal districts of the northern hemisphere. Until recently members of the group were unknown in New England and adjacent Canada, but we now know one of them as a frequent plant of clearings and open banks as far south as the Rangeley Lakes in western Maine, so near the New Hampshire border that the plant may be sought with confidence in northernmost New Hampshire; another representative of the series has long been known from Labrador but its identity not clearly made out, and this plant has recently been found in Quebec south of the St. Lawrence; and a third plant, of Anticosti, though represented in herbaria, has remained without definite identification until the present time. In studying these plants and their affinities the writers have found it convenient to draw up the following brief synopsis to cover the leading characters.

* Cauline leaves lanceolate, with smooth or slightly ciliate margins, usually much exceeded by the peduncles or the branches of the inflorescence.

E. ACRIS L. Plant more or less hirsute: inflorescence racemose or paniculate, of numerous medium-sized heads (involucres 5–9 mm. high): involucral bracts very hirsute.—Sp. Pl. 863 (1753); Gray, Syn. Fl. i. pt. 2, 219 (1884), in great part.—Said by Dr. Gray to occur in Labrador, but seen by us only from Eurasia and the Rocky

Mountain region. Represented in the East by

Var. ASTEROIDES (Andrz.) DC. Similar in habit, glabrous or only slightly hirsute: peduncles and involucre glandular-puberulent; involucral bracts at most a little hirsute at base.— Prodr. v. 290 (1836). Var. droebachensis Blytt, Norges Fl. i. 562 (1861); Gray, Syn. Fl. i. pt. 2, 220 (1884). E. droebachensis O. F. Muell. Fl. Dan. v. pl. 874 (1782). E. asteroides Andrz. ex Besser, Enum. Pl. Vohl. 33 (1821-22).— Recent clearings, open banks, etc., Gaspé County, Quebec, to Alaska, south to southern New Brunswick, northern Maine, northern Michigan, Colorado, Utah, and Oregon; also Eurasia. In the Northeast known as far south as the Kennebeckasis River, New Brunswick (Norton, coll. Hay), the Mattawamkeag River, Maine (Crystal, coll. Fernald), and the Rangeley Lakes, Maine (Kennebago Lake Trail, coll. Miss Furbish).

Var. oligocephalus, n. var., caulibus solitariis vel caespitosis 6–30 cm. altis hirsutis eglandulosis vel non evidenter glandulosis; capitulis subnutantibus demum erectis solitariis vel 2–8 laxe corymbosis, pedunculis plerumque elongatis valde ascendentibus; involucro 7–10 mm. longo, bracteis lineari-attenuatis appressis hirsutis; radiis

lilacinis in siccitatis subcaeruleis discum paullo superantibus.

Stems solitary or tufted, 6-30 cm. high, hirsute, glandless or not obviously glandular: heads at first somewhat nodding, becoming erect, solitary or 2-8 in a loose corymb, the mostly elongate peduncles strongly ascending: involucre 7-10 mm. long; its appressed linearattenuate bracts hirsute: rays lilac (drying bluish), slightly exceeding the disk.— Var. debilis Gray, Syn. Fl. i. pt. 2, 220 (1884) as to Labrador and Hudson Bay plants. E. alpinus β Hook. Fl. Bor.-Am. ii. 18 (1834). E. elatus Greene, Pittonia, iii. 164 (1897), not E. alpinus γ elata Hook. l. c.— Labrador to Mackenzie, south to Gaspé County, Quebec, and Alberta. Examined from the following stations. Labrador: near Okak (Weiz); wet calcareous-sandstone crests and slopes, Blanc Sablon, August 6, 1910 (Fernald & Wiegand, no. 4138, TYPE in Gray Herb.). Hudson Bay (Burke). Quebec: gravelly banks of River Ste. Anne des Monts, July 16, 1906 (Fernald & Collins, no. 255). Mackenzie, Fort Good Hope, July 12, 1892 (Elizabeth Taylor, no. 29). Alberta, above Laggan, July 13, 1904 (John Macoun, Herb. Geol. Surv. Can., no. 65,548).

The Weiz material from northeastern Labrador and the Burke specimens from Husdon Bay were included by Dr. Gray in var. debilis, but the more recent collections from southern Labrador and eastern Quebec show that the eastern material differs in several points from the northwestern specimens which were first cited and well characterized in the original description of var. debilis. In true var. debilis the heads are commonly smaller, the peduncles and involucres are obviously glandular-puberulent but scarcely hirsute, the involucral bracts have somewhat squarrose tips, and the rays in dried specimens are roseate and conspicuously longer than the disks. As shown by an authentic specimen given by Hooker to Gray our plant is Hooker's E. alpinus " β . foliis angustioribus, ramis elongatis" from the "Rocky Mountains in elevated situations." 1 Var. oligocephalus also matches very closely the description of E. elatus Greene, but it apparently is not E. alpinus γ elata Hook., from which variety Greene derives his specific name. Hooker's E. alpinus γ elata was very inadequately described, being distinguished from E. alpinus by the single word "subpedalis," but, whether or not its name can be con-

¹ Hook, Fl. Bor.-Am. ii. 18 (1834).

sidered much better than a nomen nudum, a specimen of it given by Hooker to Gray shows it to be a much more leafy plant than E. acris, var. oligocephalus, with the comparatively short-peduncled heads forming a racemose inflorescence as in true E. acris and the var. asteroides.

* * Cauline leaves elongate-linear, bristly-ciliate, usually equaling or exceeding all but the uppermost peduncles of the strict raceme.

E. Lonchophyllus Hook. Fl. Bor.-Am. ii. 18 (1834). E. armerifolius Turcz. in DC. Prodr. v. 291 (1836). E. armeriaefolius Gray, Proc. Am. Acad. viii. 648 (1873), Syn. Fl. i. pt. 2, 220 (1884). E. racemosus Nutt. Trans. Am. Phil. Soc. vii. 312 (1841).—A characteristic plant in saline meadows from the Black Hills and the Saskatchewan Plains westward across the Rocky Mountain region: also in northern Asia. The only eastern material seen by us is from Anticosti (coll. Verrill). This specimen was on a sheet in the Gray Herbarium with other material and seems to have formed the basis for Dr. Gray's record in the Synoptical Flora of E. acris (true) from Anticosti.¹

WILLIAM GLEASON GOLDSMITH.

October 7, 1910,² passed away at his home in Andover, Mass., William Gleason Goldsmith, a very versatile and gifted man. Born in Andover, November 28, 1832, the eldest son of Jeremiah Goldsmith and Elizabeth Gleason — he was trained for college at Phillips Academy. After the usual four years course at Harvard, he graduated with high honors in 1857, ranking especially high as a Greek scholar. While there he studied botany with Prof. Gray and also studied anatomy. During the year 1858, he read law with Squire Hazen, until he was called to accept the position of Principal of Punchard Free School, which he held from 1858–1886. During a brief inter-

The occurrence of E. lonchophyllus, a typical plant of saline habitats in the Rocky Mountain region, at an isolated station near the mouth of the St. Lawrence calls to mind the similar occurrence of Aster angustus T. & G., which grows in "wet saline soil" (Nelson) in the Rocky Mountain area, at a single station on the lower St. Lawrence (Cacouna, where it grows at the margin of the salt marsh); and a station of the similar Aster frondosus T. & G. on salt marshes at Brackley Point, Prince Edward Island, though otherwise known only on saline spots from Wyoming and Colorado to the Sierra Nevada.

² For the dates in this notice I am indebted to the issue of the Andover Townsman for Friday, October 14, 1910.